



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,981	09/10/2003	Dale John Shidla	200310485-1	3969

22879 7590 11/14/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

ASSESSOR, BRIAN J

ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/658,981	SHIDLA ET AL.
	Examiner	Art Unit
	Brian J. Assessor	2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 August 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-11, 13 and 14 is/are allowed.
- 6) Claim(s) 15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 September 2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/27/2005.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Claim 11 has been canceled.

Claims 1 and 13-15 have been amended and are addressed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 9-12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fruehling (6,625,688) in view of Raina (6,134,675).

As per claim 15:

A computer-readable program product stored on a computer-readable medium for execution on a target microprocessor, the program product comprising executable code that includes a diagnostic operation scheduled for a functional unit that would otherwise be idle during a cycle (Fruehling column 11, lines 32-34)

Fruehling fails to explicitly disclose a method for scheduling a comparison of a result from executing the diagnostic operation with a corresponding predetermined result.

In column 2, lines 7-13; Raina clearly discloses a method that compares the result of the processor being tested to an expected predetermined value. It would have

been obvious to a person skilled in the art at the time of invention to include the comparison method as taught by Raina in order to create an effective testing method. This would have been obvious because Raina clearly teaches that the above process is better suited for creating a faster and improved processor testing method. (Raina column 1, lines 12-23)

Response to Arguments

Applicant's arguments filed 8/29/2006 have been fully considered but they are not persuasive.

As per claims 1-11 and 13-14:

The arguments are moot in view of the indication of allowable subject matter.

Applicant's Arguments:

Applicant argues that the diagnostic operations are scheduled for a functional unit and not a CPU.

Examiner's Answer:

Fruehling deals primarily with microcontrollers in which each CPU would include multiple functional units, each used for different type of computation. Raina also tests processors that have multi-core processors, each of these processors would be a functional unit within the processor. Therefore, the arguments have been considered but examiner respectfully maintains the rejection.

Allowable Subject Matter

Claims 1-11 and 13-14 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 is allowable over the prior art for the following reasons. The specific element of compiling the program while carrying out the tasks of running diagnostic tests on the functional units is allowable over the prior art.

Claims 2-11 are allowable through dependency upon claim 1.

Claims 13-14 are allowable for the same reason as claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Assessor whose telephone number is (571) 272-0825. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BA



SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER